

Connecticut Angler Recruitment, Retention and Reactivation (R3) Plan **April 2022**

Department of Energy and Environmental Protection

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https://portal.ct.gov/DEEP/Fishing/CT-Fishing











Sport Fish Restoration: The Dingell-Johnson program is a cooperative effort involving Federal and State government agencies, the sport fishing industry, anglers and boaters. The program increases sport fishing and boating opportunities through wise investment of excise tax dollars in sport fishery development and management projects. Funds are derived from a 10 percent Federal excise tax on selected fishing tackle and equipment. The Wallop-Breaux Amendment of 1984 expanded the program by adding more tackle and sport fishing equipment under the excise tax and included the Federal fuel taxes attributable to motor boats and small engines. The program has helped State agencies restore and better manage America's fisheries resources.

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Introduction:

Fishing Fuels Conservation.

Anglers fund fish conservation and management directly through license sales, and indirectly through excise taxes on fishing equipment since the passage of the Sport Fish Restoration Act in 1950. This user pay, user benefit system of funding fish and wildlife



Sport Fish and Wildlife Restoration "Cycle of Success" graphic provided by the USFWS.

restoration has been an amazing achievement, conserving our natural resources and



A young angler holding a big Northern Pike.
Photo submitted to DEEP for the Fishing
Guide cover contest.

democratizing access. Nationally, the funding system leads to a "cycle of success", wherein participation in fishing and hunting funds fish and wildlife management programs, which in turn improve fishing and hunting, thereby encouraging more participation.

We firmly believe that fishing also provides many benefits to those who choose to participate. Depending on your interests, fishing can offer excitement or relaxation, social connections, or quiet reflection. In addition, Connecticut's fisheries also offer a local, healthy, and sustainable food source for those

who choose to harvest their catch. Lastly, fishing fosters a unique connection with nature, leading anglers to appreciate and advocate for Connecticut's natural resources.

For these reasons, state Fish and Wildlife agencies seek to Recruit, Retain, and Reactivate (R3) anglers. In fact, fish and wildlife agencies, NGOs, and anglers themselves have sought to preserve the relevance of fishing for decades. Efforts to broaden participation in fishing in Connecticut date back to at least 1933, when



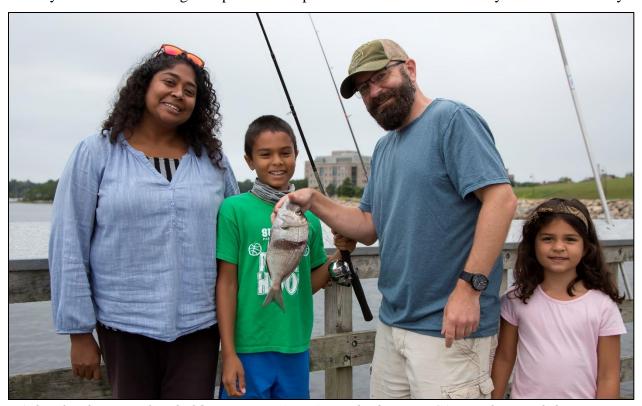
Edith Stoehr teaching fly fishing at the Branford River Women's Fishing Reserve, 1935. State Archives, Connecticut State Library. Originally accessed at ctexplored.org.

Edith Stoehr, the first female game warden in the United States, patrolled "an exclusively feminine trout stream" on the Branford River – part of an effort to encourage women to take up fishing. In 1986, the Connecticut Aquatic Resources Education (CARE) program was founded to teach fishing to Connecticut's kids and families. The CARE Program is still going strong today, serving over 4,000 students in 2020 despite the ongoing global COVID-19 pandemic. Other efforts, such as the Community Fishing Waters and Enhanced Opportunity Shore Fishing programs, have sought to improve access to and awareness of fisheries close to home for Connecticut's urban residents. These programs have benefitted many thousands of anglers and there is much we can still learn from them today.

However, Connecticut needs to balance participation in fishing with responsible management of the fishery resources under our charge. Connecticut, like other small states,

receives the minimum Sport Fish Restoration (SFR) grant amount, which is based on the square mileage of the state's land and inland waterways as well as the number of fishing licenses sold. As a "minimum state", selling more fishing licenses would not lead to an increase in SFR funds unless we dramatically increased participation beyond historical levels. The Fisheries Division also receives Connecticut General Fund contributions to help support our Fisheries programs. The combined revenue from both sources allows us to manage our fisheries for the betterment of our resources and the use and appreciation of our citizens. As we move forward, Connecticut needs to continue balancing fishing R3 with the conservation and management needs.

Given the lessons of past efforts and our unique financial situation, the Connecticut DEEP Fisheries Division should prioritize efforts that focus on increasing participation by improving the quality of and equitable access to fisheries resources and information. This is directly in line with the original spirit of the Sport Fish Restoration Act's "cycle of success". By



A family of new anglers holding a porgy (scup) caught during a CARE saltwater fishing event.

focusing our efforts on cost-effective activities that improve the quality of and access to fisheries for all of Connecticut's diverse residents, we can work to keep fishing relevant in a rapidly changing society without compromising the quality of our natural resources.

Who is Fishing in Connecticut:

The first step to any effective R3 effort is understanding the target audience – everyone who is fishing or interested in fishing in Connecticut. While it is difficult to learn about would-be anglers, licensing data tell us much about who is fishing in Connecticut today. In 2021, 173,613 people bought one or more fishing licenses (see pages 46-47 of appendix for all license types included in this and following analyses). This is a decrease from the historically high participation seen in the 90s, but more participants than were seen in 2018 and 2019. Using United States Census Bureau estimates for CT, we can see that participation in fishing generally ranges from 3-4% (Figure 1).

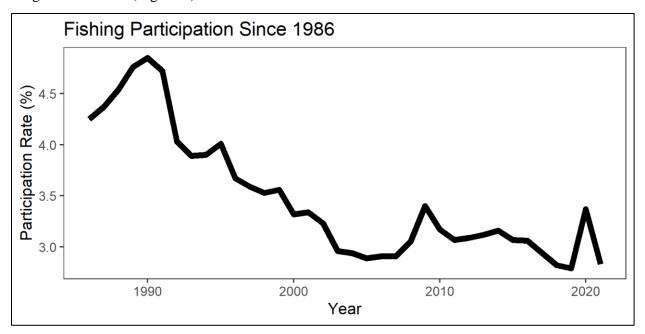


Figure 1: The number of people who bought a CT fishing license as a fraction of the population from 1986-2021. Estimates for recent years are underestimated in this figure because only license types available prior to the deployment of the online licensing system were included, allowing for a valid comparison with historical sales.

Looking more closely at the types of licenses purchased reveals interesting trends. In the early 2010's, most anglers transitioned from getting separate inland and marine licenses to purchasing the combined all waters license (see pages 48-49 of the appendix for participation through time by license type). The notable exception to this trend is senior citizens who choose the free 65+ inland and marine licenses because there is no free 65+ all waters equivalent. The age distributions of anglers by license type in 2021 clearly demonstrates this trend (Figure 2). Also, a gradual increase in the average age of anglers is driven primarily by those receiving free 65+ licenses. The average age of anglers receiving paid licenses has only varied from 40.8 to 42.7 since 2009.

There has also been a dramatic shift in how anglers buy their licenses since the option to buy a license online was created. The online sales channel has gone from contributing to one quarter of sales in 2009 to three quarters in 2022 so far (Figure 3). Ensuring the ease and reliability of transactions made online for mobile users is more important than ever. The online sales also offer an increasing opportunity to understand angler purchasing behaviors using Urchin Traffic Monitors (UTM) and Google Analytics. For example, we are able to see which webpages, email communications, or other resources anglers use to navigate to our licensing platform. This work has already yielded insights into the immense value of our web presence in connecting anglers to the online licensing platform that help us prioritize certain pages.

Lastly, licensing has been collecting the gender and ethnicity of license buyers that provide this information since 2009. Unfortunately, a large proportion (34%) of sales made in person indicate "Other" for ethnicity. This suggests that some license vendors select "Other" when selling licenses rather than asking or assuming the buyer's ethnicity. Internet sales also have a proportion of "Other" users that is unrealistically high (20%) as compared to their

proportion of the population per census estimates (less than 3%). For this reason, we are not including "Other" in the following analyses, acknowledging that this creates some uncertainty in our estimates and excludes constituents who do not identify as any of the provided ethnic categories.

Women and ethnic minorities are underrepresented among Connecticut's anglers. Women comprised only 16% of anglers in 2021. Women's participation increased from 12% to 16% between 2009 and 2015 but has been constant since. Non-Hispanic Whites are 87% of anglers but only 66% of the population of Connecticut. Asian, Black, Hispanic, and Native American constituents represent 2%, 3%, 7%, and 0.3% of anglers despite being 5%, 12%, 17%, and 0.6% of the population of Connecticut, respectively. Participation rates for ethnic minorities have been slowly increasing since data became available in 2009. The reasons for a continuing disparity in participation are unknown, but may relate to cultural, historical, and economic differences among ethnic groups as well as differences in access to fisheries resources as minority ethnic groups in Connecticut tend to be more concentrated in urban areas.

Knowing who is fishing in Connecticut tells us who we are reaching, and the disparities in participation help discover constituents that could be served better. Specifically, reaching the women, ethnic minorities, and young adults of Connecticut may require new strategies and efforts from the Fisheries Division to ensure equitable access to fishing opportunities and information.

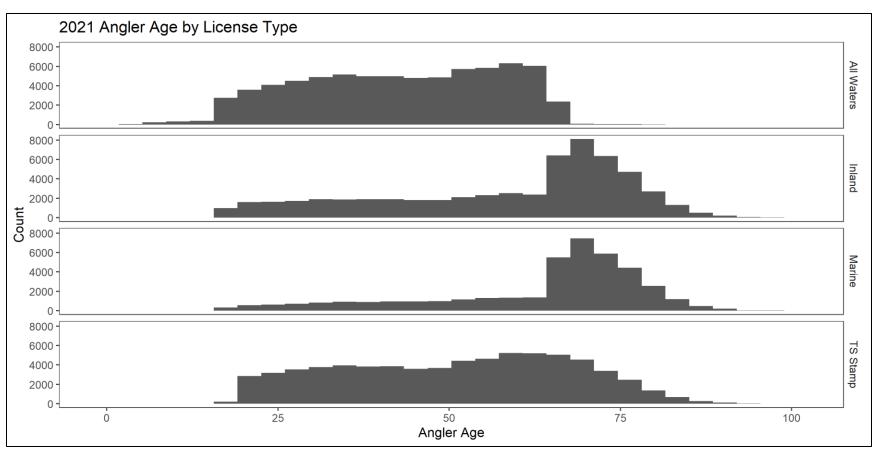


Figure 2: The age distributions of license buyers sorted by licensing category in 2021. License category names can be found on the right-hand side.

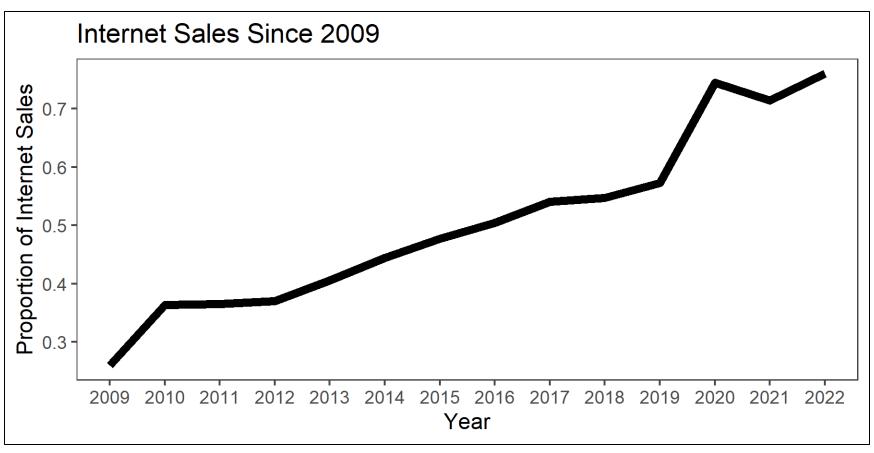


Figure 3: The proportion of fishing licenses bought via our online licensing platform from 2009 to the first quarter of 2022.

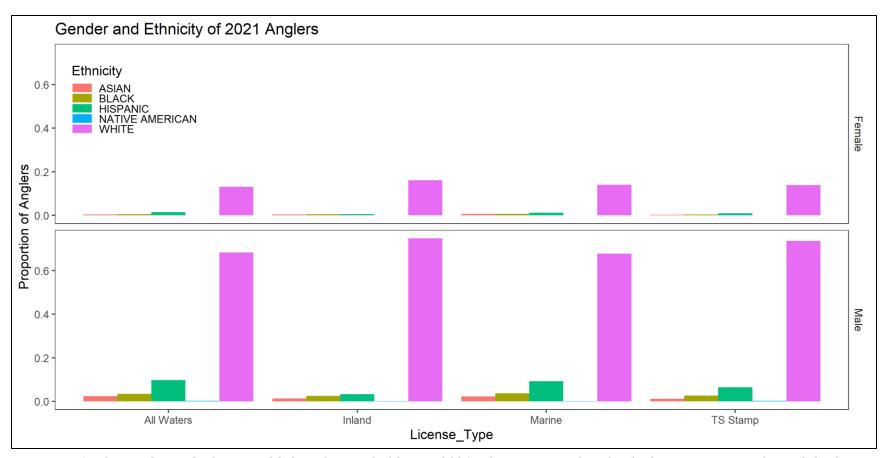


Figure 4: The gender and ethnicity of fishing license holders in 2021. The top row is female, the bottom row is male, and the four license categories are shown on the bottom. Within license categories, the different ethnic categories are color-coded. From left to right, the categories are Asian, Black, Hispanic, Native American, and White. All bars within a license category, male and female combined, sum to one.

Plan Design:

The Connecticut DEEP Fisheries Division has developed an Angler R3 Plan to distill what has been learned and organize our efforts moving forward, designed to complement the previously developed Hunting R3 Plan. The Angler R3 Plan needs to function at multiple levels. Some users will desire a broad overview of our vision, some will be interested in more details on our specific goals and objectives, and those working to implement the plan will need action items, evaluation strategies, and more. To make the plan relevant to each of these audiences, our R3 efforts are structured into a hierarchy of three different themes: Opportunities and Access, Adult-Onset Participation, and Feeding the Flame. Each theme was led by a different staff member and has a hierarchy of goals, objectives, and details needed for implementation. To organize these elements in a consistent way that allows for mutual understanding and collaboration, we used a template adapted from the Colorado academic standards by Tabbi Kinion of the Arkansas Game and Fish Commission for their R3 plan. These "R3 Standards" allowed us to provide detailed information related to each objective that staff and partners can use to guide implementation.

Many of the proposed objectives will create or refine products as varied as Community Fishing Waters and online learning platforms. To make the most of these efforts, we will leverage our strong social media following, email listservs, and communications office to get the word out about our new and improved products. Specific marketing efforts are proposed as appropriate throughout the plan.

To learn and grow from our efforts, it's also essential to first view them and their effects clearly. We need to develop clear metrics and evaluation strategies in advance to know if what we are doing is having the intended effect. Ongoing evaluation offers the opportunity to manage

adaptively – to lean into what is working and fix what is not during the course of a program. Evaluation upon completion lets us know if the results justify continuation in an environment where resources are limited. As such, the proposals in this plan will be subject to evaluation based on analyses determined in advance of implementation that accompany each objective.

The following is an executive summary of the three themes (numbered) with their goals (lettered) and objectives (roman numerals). Afterwards, each theme will be explained in further detail, with each objective being paired with the information needed to implement and evaluate.

- 1. Opportunities and Access Brian Eltz and David Molnar
 - a. Maintain and expand diverse, high-quality fisheries in Connecticut.
 - i. Explore opportunities to expand the Community Fishing Waters (CFW)
 and Enhanced Opportunity Shore Fishing (EOSF) programs.
 - ii. Design and implement a litter mitigation plan for CFW and EOSF sites.
 - b. Increase the awareness of fishing opportunities to a diverse audience.
 - i. Support CT Fish and Wildlife app development.
 - ii. Develop a resource map of all publicly accessible fishing access points.
 - iii. Create Spanish translations of important web content.
- 2. Adult-Onset Participation Justin Wiggins
 - a. Education self-paced virtual instruction and in-person fishing instruction.
 - i. Develop an e-learning introductory fishing course.
 - ii. Deliver virtual "Learn to Fish" content through videoconferencing.
 - b. Community create, connect, and coordinate community fishing groups.
 - Develop a community page for anglers to discover and connect with fishing groups in Connecticut.

- ii. Develop community group of CARE volunteers.
- c. Resources ensure access to online resources for adult-onset anglers.
 - i. Develop an instructional video library.
- 3. Feeding the Flame Mike Beauchene
 - a. Develop start to finish informational guides, also known as "roadmaps", of resources to get involved in fishing.
 - i. Create saltwater and freshwater fishing roadmaps.
 - ii. Develop species-specific roadmaps for underutilized fisheries.
 - b. Improve angler recognition.
 - i. Electronic submission system for angler catches.
 - ii. Improved user access to catch data.

Opportunities and Access:

There is no fishing without fish and ways to access them. Accordingly, ensuring access to high quality fishing opportunities must be a central component of any effort to increase participation in fishing. In recent years, the Fisheries Division has increasingly focused on improving fishing opportunities in urban communities through trout stocking, Channel Catfish stocking, and special regulations. These efforts have created new, high-quality fisheries closer to home through the Community Fishing Waters Program and the Enhanced Opportunity Shore Fishing Program. However, public support of Channel Catfish stocking has been mixed, and we still do not fully understand what fishing opportunities are most preferred by urban constituents. Additionally, some of our more popular urban fishing sites suffer from excessive littering, reducing the aesthetic value and potentially the safety of public access points. As such, continued efforts to improve urban fishing opportunities should seek more community input and foster local stewardship to create and maintain fishing opportunities that are both accessible and desirable to a diverse audience.

In additional to physical access, anglers need access to information. Legal access and freshly stocked fish serve no purpose if they remain unknown to the public. To address this limitation, we plan to develop a resource map of all known fishing opportunities, largely building on existing resource maps. In addition, about 12% of Connecticut residents are native Spanish speakers. Consistently offering bilingual content on fisheries-related webpages will make Connecticut's excellent fishing opportunities more accessible to our Spanish speaking communities. Lastly, combining these resources and others into a mobile app will allow easy access for upcoming generations of anglers. The following tables cover each objective in greater detail, outlining how we will improve fishing opportunities and access in Connecticut.

| Theme | Opportunities and Access. | |
|--|---|---|
| Goal | Maintain and expand diverse, high-qua | lity fisheries in Connecticut. |
| Objective | Explore opportunities to expand the Community Fishing Waters (CFW) and | |
| #1 | Enhanced Opportunity Shore Fishing (EO | SF) program. |
| Strategies | What needs to be done? | Target Audiences |
| desired in urba B: Inventory lanear underserv | akes, ponds, and shore access points in or yed urban centers that could support | Urban residents lacking quality, nearby fishing opportunities. |
| C: Prioritize fo | W or EOSF sites. uture CFW and EOSF sites based on revious strategies. | |
| Actions | To-do list to accomplish above strategies. | Resources needed |
| the desires of A.2: Deploy stand EOSF site A.3: Deploy stand EOSF site A.3: Deploy stand EOSF site A.3: Deploy stand EOSF site A.4: Analyze stand esirable fisher B.1: Focusing New Haven, Son Danbury, New inventory publishmediately a from nearest cand other relevant by the stocking if app B.2: Perform stocking if app B.3: Rank involved stocking if app B.3: Rank involved stance from the stand export fish stand EOSF C.1: Develop strategies A and additional CFC.2: Communicontacts of the stand EOSF contracts of the standard EOSF contracts of the standar | a multi-mode survey to better understand urban anglers. urvey in-person to anglers at current CFW is. urvey via social media, email listsery, and its newsletter, including questions that let ers as urban, suburban, or rural. survey results to determine what makes a ery to urban constituents. on the 10 largest cities in CT (Bridgeport, itamford, Hartford, Waterbury, Norwalk, its Britain, West Hartford, and Bristol), lic fishing access points within or diacent to city limits, noting distance urrent CFW and EOSF, waterbody size, want characteristics. Site visits to access points from B.1 to of access and determine eligibility for fish propriate. entoried sites based on need (as measured om nearest CFW or EOSF), quality of atterbody characteristics (e.g., if it can | Staff time to develop and evaluate survey results. Seasonal(s) to perform angler surveys at current CFW and EOSF sites. Access to emails of urban anglers. Ability to add to the CT Fishin' Tips newsletter. Permissions to post on Connecticut Fish and Wildlife social media accounts. Staff time to inventory fishing access points and perform site visits. Contact information for owners/maintainers of fishing access points that are high-priority candidates for establishing CFW or EOSF sites. Staff time to communicate and coordinate with aforementioned parties. |

| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) |
|--|--|---|
| Survey from strategy A has been developed and is being deployed though multiple mediums. The work of inventorying urban fishing access points has been allocated to the appropriate staff and is underway. | | Survey results have been analyzed and developed into a publicly accessible report. The fishing access inventory is complete and made available for use in other complementary objectives (e.g., develop a resource map of all known, publicly accessible fishing access points). A scoring system to prioritize potential CFW and EOSF sites has been implemented, and a report has been developed to share results internally. |
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) |
| Do we have an improved understanding of the desires of urban anglers in Connecticut? Do we know what waterbodies and management paradigms could be developed to best meet the needs and interests of our urban anglers? | | Ensure that we have analyzed the feedback of greater than 200 urban anglers from multiple communities in Connecticut and found common themes in what constitutes a desirable fishery. |
| Connections | Community Fishing Waters, Enhanced Opportunity Shore Fishing, Trout Stocking Map, Saltwater Resources Map, Angler Surveys | |

| Theme | Opportunities and Access. | |
|--|--|---|
| Goal | Maintain and expand diverse, high-qua | lity fisheries in Connecticut. |
| Objective #2 | Design and implement a litter mitigation p | plan for CFW and EOSF sites. |
| Strategies | What needs to be done? | Target Audiences |
| in place at CFB: Estimate the management. C: Develop an | current litter mitigation strategies, if any, W and EOSF sites. e need for additional site-specific litter ad propose solutions to the relevant CFW tners to mitigate litter accumulation. | Anyone who recreates at a designated CFW or EOSF site. |
| Actions | To-do list to accomplish above strategies. | Resources needed |
| reducing litter Objective #1, A.2: Commun their experience including any B.1: Have staff mitigation dur Objective #1, B.2: Staff show amount of trast B.3: Findings report detailin CFW and EOS C.1: Where ne established, di support the loc relevant CFW C.2: Develop a staff from the from C.1 and a managers by p coordination v solutions. C.3: Work wit proposed litter C.4: Perform a | trash cans, signage, or other methods of during the angler surveys proposed in Action A.2. icate with CFW and EOSF partners about ces managing litter at their locations, current or past mitigation strategies. If assess the need for additional litter ing the angler surveys proposed in Action A.2. ald briefly describe the location, type, and the encountered at each location. should be summarized into an internal g the site-specific litter burden at each SF site. The dot additional litter control has been scuss what the CT DEEP could do to cal managers by reaching out to the and EOSF partners. In temporary working group of CT DEEP BNR and BOR to review suggestions assess opportunities to support local providing seasonal support, signage, with volunteer groups, or other proposed of the community partners to implement an additional in-person assessment action B.2 after implementation to | Seasonal(s) to assess need for litter mitigation during angler surveys at CFW and EOSF sites before and after implementation of litter mitigation strategies. Contact information for CFW and EOSF partners. Staff time to communicate and coordinate with aforementioned parties. BNR and BOR staff time to run temporary working group. Additional resources based on the solutions proposed in Action C.2 and implemented in Action C.3. Staff time to evaluate success of strategies based on findings from Actions B.2 and C.4 and write an internal report. |

| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) |
|--|--|---|
| Current litter mitigation strategies and the need for additional site-specific support are known. CFW and EOSF partners' contact information is compiled. Potential members of the litter mitigation working group are identified. | | Strategies for litter mitigation have been implemented where appropriate and seasonal staff have surveyed the type, amount, and location of litter pre- and post-implementation. These results have been analyzed and written into an internal report. |
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) |
| Have we improved the quality of access at our urban fishing locations by reducing litter? | | Determine if the litter mitigation strategy successfully reduced trash burden by analyzing pre- and post- implementation litter results collected in Actions B.2 and C.4. |
| Connections | Community Fishing Waters, Enhanced Op Surveys | pportunity Shore Fishing, Angler |

| Theme | Opportunities and Access. | |
|--|---|---|
| Goal | Maintain and expand diverse, high-qua | lity fisheries in Connecticut. |
| Objective | Support CT Fish and Wildlife app development. | |
| #3 | | |
| Strategies | What needs to be done? | Target Audiences |
| A: Review pre | evious attempts at app development and | Young adults and tech-savvy |
| develop new s | • | anglers who want fishing licenses |
| | RBFF R3 Grant to support app | and information organized and |
| development. | | readily available on mobile devices. |
| _ | ing informational and logistics support to | |
| * ** | evelopment and continued operation. | |
| Actions | To-do list to accomplish above strategies. | Resources needed |
| | ne App Development Working Group. | Staff time to review previous app |
| _ | previous CT Fish and Wildlife app | development efforts and develop |
| - | naterials, including proposals, business | new strategy. |
| | nts, any contractor communications, and | Staff time and Business Office |
| staff assignme | | support to submit an R3 grant to |
| | e why app development efforts stalled I rethink strategy for promoting | RBFF to develop app. |
| development. | reunik strategy for promoting | State funds to cover development costs and/provide cash match to |
| development. | | RBFF grant if successful. |
| B.1: Include a | pplying for an RBFF R3 grant to support | Staff time to provide app content |
| | ent as part of A.2. | and ongoing support to developers |
| | ft proposal among BNR outreach staff to | and app users. |
| refine. | | |
| B.3: Discuss p | proposal with Stephanie Hussey (RBFF) to | |
| ensure compe | | |
| - | commitment to pursue app development | |
| with cash-mat | ch from the business office. | |
| C.1: Provide o | content to app developers including maps, | |
| | censing information, etc. | |
| C.2: Implement | nt communication feature for app users to | |
| | f questions and ensure these | |
| | ns are addressed in a timely fashion. | |
| C.3: Provide updated content as needed for the lifetime | | |
| of the app. | W 0 // 1 | T 7 T 9 (1 1 ::2 |
| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) |
| Previous app development efforts have been reviewed The CT Fish and Wildlife app | | The CT Fish and Wildlife app is |
| | | operational and receiving ongoing |
| | contractors have been identified and an | support from developers and |
| R3 grant prop | R3 grant proposal has been submitted to RBFF. relevant staff. | |
| | | |

| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) |
|----------------|---|--|
| easier for mob | e communication easier between DEEP | Evaluate app usage statistics and assess if it is displacing mobile users of the DEEP website — indicating customer preference for the app. Assess reach and effectiveness of messages sent to app users using tracking techniques and compare to email communications. |
| Connections | CT is Fishy, Trout Stocking Map, Saltwar | ± • |
| | Fishing Guides, Online Licensing System | |

| Theme | Opportunities and Access. | |
|---|---|---|
| Goal | Increase the awareness of fishing oppor | tunities to a diverse audience. |
| Objective #4 | Develop a resource map of all publicly accessible fishing access points. | |
| Strategies | What needs to be done? | Target Audiences |
| B: Organize d C: Make the re public on our | ata on public fishing access. ata into a user-friendly, interactive map. esource map and raw data available to the website. he new product through multiple | Novice anglers looking for access points close to home. Experienced anglers trying to identify new opportunities. |
| Actions | To-do list to accomplish above strategies. | Resources needed |
| Trout Stocking A.2: Add any or described in A.3: Add site-A.4: Add free Maps share fee A.5: Include at A.6: Send drawn B.1: Develop compiled in st B.2: Implement B.3: Allow for (e.g., letting ustocked vs. not C.1: Create at C.2: Embed the addition to proceed the map as an C.4: Make the altering metadlinking from matter and the map as an C.4: D.1: Develop product. D.2: Share ling Fish and Wild D.3: Include it Fishin' Tips not the control of the product of the control | access data from the CT is Fishy App, g Map, and Saltwater Resources Map. additional sites listed in the Fishing Guide in Objective #1, Strategy B. specific regulations to access point data. directions when possible, using Google ature (e.g., Bantam Lake Boat Launch). I list of known species when available. It inventory to Fisheries staff for review. an ArcGIS web application using data rategy A. In the "Near Me" widget. In intuitive user queries to filter results ser sort by freshwater vs. saltwater or it stocked). webpage to house the resource map. In map on the page itself, if possible, in oviding link. I link to download the raw data supporting Excel sheet. It map easily discoverable to web users by lata for search engine optimization and multiple sources on the DEEP website. an infographic highlighting the new map is a map and infographic on each Connecticut life social media account. Infographic and link to product in CT | Staff time to compile data from various sources. Staff time to review data. ArcGIS software and staff time to develop raw data into ArcGIS web application. Staff time to develop webpage. Staff time to develop infographic. Staff time and social media permissions to share link to newly developed webpage via several mediums. |

| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) |
|---|---|--|
| Staff have been assigned to project and access data are being collected in a shared repository. | | Online map application containing information on known access points has been created and widely distributed. |
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) |
| | e it easier for Connecticut residents to find tunities in the state? | Using Google Analytics, track if users are trending towards the new map over existing products (e.g., Saltwater Resource Map) and if usage is increasing generally with time. Include link to feedback form in the map interface to allow users to comment on incorrect or incomplete information and review product. |
| Connections | Saltwater Resource Map, Trout Stocking | 1 |

| Theme | Opportunities and Access. | |
|---|--|---|
| Goal | Increase the awareness of fishing opportunities to a diverse audience. | |
| Objective | Create Spanish translations of important web content. | |
| #5 | | |
| Strategies | What needs to be done? | Target Audiences |
| | what webpages are good candidates for | Connecticut residents who prefer or |
| translation into | • | require Spanish language content. |
| | xt from the webpages in Strategy A to | |
| _ | eting Network Inc. for translation. | |
| _ | ish versions of the translated pages. andard way to toggle between English and | |
| Spanish version | | |
| * | orkflow to maintain new pages. | |
| Actions | To-do list to accomplish above | Resources needed |
| | strategies. | |
| A.1: Identify t | he top 10 most trafficked pages using | Staff time to access and review |
| Analytics. | | Google Analytics data and existing |
| A.2: Identify p | pages with information needed for legal | webpages. |
| compliance. | | Funds to cover translation services |
| - | pages of evergreen content (i.e., pages that | with Global Interpreting Network |
| stay relevant v | vithout ongoing maintenance). | Inc. |
| D 1. Compile | the toys from magazidentified in Strategy | Bilingual staff time to review translation. |
| _ | the text from pages identified in Strategy Global Interpreting Network Inc. | Content author staff time to create |
| | ne for internal review of initial | new webpages. |
| | bilingual DEEP staff. | Graphic design staff time to |
| | omingual BEBI stair. | develop translation toggle feature. |
| C.1: Create we | ebpages with updated Spanish text. | Ongoing administrative burden on |
| | Iternative text of pictures and page | content authors to track changes to |
| metadata. | | the translated webpages and |
| | | communicate updated text with |
| _ | a small, eye-catching, and intuitive | Global Interpreting Network Inc. |
| | placed at a standard location on pages for | |
| | ions are available. | |
| | graphic with a link to its translated | |
| equivalent to each page for which translations are available. | | |
| avanable. | | |
| E.1: Ensure content authors track changes to the English | | |
| versions of translated pages. | | |
| E.2: Regularly submit these updates to Global | | |
| Interpreting Network Inc. to make timely updates to | | |
| Spanish translations. | | |
| _ | shared document to track the old and new | |
| versions of the | English and Spanish text. | |

| E.4: Encourage to the Spanish | ge internal review of substantive changes a translations. | |
|--|---|---|
| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) |
| | eed of translation have been identified and sent to Global Interpreting Network Inc. | Spanish translations are easily accessible for our most popular and important pages. |
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) |
| Have we made our web content more accessible to the Spanish-speaking residents of Connecticut? | | Using Google Analytics, track if the new Spanish pages are increasing in usage over time and/or being used in proportion to the fraction of anglers who identify as Spanish speaking. |
| Connections | Spanish version of the Fishing Guide, Spa | nish translation of new Pocket Guide |

Adult-Onset Participation:

Let's be clear. . . no one wants to stop teaching kids how to fish! But there's a problem — it can be hard to make a difference in participation by targeting kids directly. Kids often don't have control of the resources (money, time, and transportation) that they would need to go fishing when their guardians don't already fish. If their guardians do fish, then they are likely to learn fishing within the family without our assistance. Additionally, there are countless adults who didn't benefit from early fishing experiences with their families. This may be especially true in underserved communities where we are establishing new fishing opportunities because the lack of historical fishing options in these areas would have hindered the development of local fishing knowledge and traditions. Everyone deserves an opportunity to learn about and benefit from our public trust resources, regardless of background.

Fortunately, most adults are interested in fishing even though only a minority participate. By tailoring educational materials and community outreach efforts we can make fishing more welcoming to adults in Connecticut. For those with children, they will become equipped to pass their newfound fishing traditions on for generations to come. The following objectives will describe in greater detail how we plan to support adults who may have no previous fishing experience through education, fostering engagement with the fishing community, and connecting them with existing fishing resources. Our Adult-Onset Participation team is ahead of the game and has already started to implement multiple objectives. These items are still included to show the value of ideas generated during our planning meetings and to formalize ongoing evaluations.

| Theme | Adult-Onset Participation. | |
|---|--|---|
| Goal | Education – self-paced virtual instruction | on and in-person fishing |
| | instruction. | |
| Objective | Develop an e-learning introductory fishing | g course. (*English version of course |
| #6 | is completed.*) | |
| Strategies | What needs to be done? | Target Audiences |
| A: Identify a c | contractor to pursue course development. | New anglers seeking educational |
| B: Work with | contractor to modify and establish course | content at their own pace and on |
| content. | | their own schedule. |
| | se accessible on the CT DEEP website. | Anglers who are interested in |
| _ | nish translation of course. | Introduction to Fishing but don't |
| E: Track cours | se usage and user experience. | have the ability to attend in-person. |
| Actions | To-do list to accomplish above strategies. | Resources needed |
| A.1: Determin | e business needs and find contractor with | Staff time to seek out and |
| matching capa | cities. | coordinate with contractor. |
| A.2: Work thr | ough Business Office to establish | Funds to pay contractor for course |
| working relati | onship with contractor. | development. |
| | | Staff time to provide content to |
| B.1: Work wit | h contractor to outline course features and | contractor and review product. |
| content. | | Funds to cover translation services |
| | course development by providing content | with Global Interpreting Network |
| and guidance | | Inc. |
| | n periodic reviews to ensure course | Bilingual staff time to review |
| function and c | ontent quality. | translation and potentially recreate video content. |
| C 1. Work wit | h OIM to put the course on dendete | OIM staff support to get course |
| | th OIM to put the course on depdata. inks to course where appropriate | operational on depdata. |
| | e CT DEEP website. | Content author staff time to update |
| unoughout the | o CT BELLI Website. | webpages with supporting Spanish |
| D.1: Work wit | th contractor to establish Spanish | content. |
| | ion of the course. | Staff time to monitor course usage |
| | th Global Interpreting Network Inc. as | and user feedback. |
| | slate written content. | |
| D.3: Recruit S | panish speakers as needed to recreate | |
| video content in Spanish. | | |
| D.4: Use Spanish keywords in the course metadata and | | |
| including links to it that are written in Spanish on CT | | |
| DEEP website to ensure easy access. | | |
| E.1: Work wit | h OIM to include Google Analytics | |
| tracking on liv | | |
| _ | arse engagement through time. | |
| E.3: Track any | feedback on user experience. | |

| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) |
|--|---|--|
| English language version of the course is publicly accessible on the depdata site. | | English and Spanish course versions are accessible and being used. |
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) |
| Are Connecticut anglers able to learn Introduction to Fishing material online at their own pace? Are the courses being used frequently enough to provide cost savings to CT DEEP relative to in-person courses? | | Survey course participants to determine pre- and post-confidence in fishing to ensure that angler confidence significantly improves. Using Google Analytics, track the number of unique users to determine cost-per-user and compare to the cost-per-user of incourse Introduction to Fishing courses. |
| Connections CARE Introduction to Fishing, Spanish Translations | | |

| Theme | Adult-Onset Participation. | |
|--|---|---|
| Goal | Education – self-paced virtual instruction and in-person fishing | |
| | instruction. | |
| Objective #7 | Deliver virtual Learn to Fish content through videoconferencing | |
| Strategies | (*ONGOING*). What needs to be done? | Target Audiences |
| | | Anglers who interested in |
| A: Adapt existing Introduction to Fishing course | | Introduction to Fishing and don't |
| materials to a videoconferencing format. B: Advertise the classes through multiple mediums. | | have the ability to attend in person |
| | steps to participants by coordinating | but are still interested in a live |
| | n-person fishing opportunities. | format and the ability to ask |
| | Free Commence | questions. |
| Actions | To-do list to accomplish above | Resources needed |
| l | strategies. | |
| A.1: Adjust th | ne existing Introduction to Fishing | Staff time to adapt Introduction to |
| - | resentation to not rely on physical aides. | Fishing materials and present them |
| | tent to the presentation to account for the | via videoconferencing software. |
| lack of an imi | mediately following fishing experience. | Access to a videoconferencing |
| D 1 M 1 1 | | service (e.g., Zoom). |
| | ass schedule and registration easily | Staff time to advertise classes on |
| | the CT DEEP website. | social media and through emails. |
| | the relevant webpage(s) on social media contacts where appropriate. | Staff time to manage registration. Staff time to follow up with |
| and in eman | contacts where appropriate. | participants about ongoing in- |
| C 1: Schedule | e the videoconference classes for pre- and | person fishing opportunities. |
| | eason so that participants will be able to | Staff time to maintain class |
| _ | fishing experience after. | schedules and registration forms on |
| | mails from participants in the registration | CT DEEP webpages. |
| | tise new fishing opportunities to them | |
| after course c | ompletion. | |
| Metrics | Year One (how do we know we are on | Year Five (how do we measure if |
| 1,101100 | the right track?) | we accomplished this objective?) |
| Introduction to Fishing Courses are offered through | | Introduction to Fishing Courses are |
| videoconferencing on a regular schedule. | | still being offered, and past |
| | | participants are going on to |
| | | participate in in-person fishing |
| | , | experiences. |
| Evaluation | Evaluation Questions (What needs to | Evaluation Analysis (How do we |
| 1 | be answered to determine if our actions | plan to answer the evaluation |
| | and strategies are accomplishing this | questions?) |
| | objective?) | |

| Are Connecticut anglers able to learn Introductory Fishing material in a live format through videoconferencing? | | Survey course participants to determine pre- and post-confidence in fishing to ensure that angler |
|---|------------------------------|---|
| Are the participants going on to participate in fishing? | | confidence significantly improves. Using our licensing and event |
| The the participants going on to participate in fishing: | | registration databases, track the number of participants who go on to |
| | | attend a fishing event and/or buy a fishing license. |
| Connections | CARE Introduction to Fishing | |

| Theme | Adult-Onset Participation. | |
|---|---|---------------------------------------|
| Goal | Community – create, connect, and coordinate community fishing groups. | |
| Objective | Develop a community page for anglers to discover and connect with fishing | |
| #8 | groups in Connecticut. | |
| Strategies | What needs to be done? | Target Audiences |
| | ompile contact information for reputable | New or current anglers interested in |
| fishing groups in Connecticut. | | engaging with the fishing |
| B: Create a webpage that includes information on each | | community to provide and/or |
| - | le fishing groups in Connecticut. | receive ongoing support with peers. |
| | nglers with these fishing communities. | |
| Actions | To-do list to accomplish above | Resources needed |
| | strategies. | |
| | nicate with known groups in the fishing | Staff time to coordinate with |
| • | get their contact information and | community fishing groups. |
| - | share in the proposed resource. | Content author time to put contact |
| | that they also share information about | materials on CT DEEP webpage. |
| | s not currently known to the CT DEEP. | Staff time to advertise new |
| | at to groups identified in A.2 to determine | webpage on social media and |
| - | l collect contact information and the | through emails. |
| permission to | | Staff time to adjust CARE class |
| | itional fishing groups as appropriate after | materials to include this new |
| the developm | ent of the initial repository. | community resource as appropriate. |
| | vebpage to house these fishing community | |
| resources. | | |
| | organization names and other keywords in | |
| metadata to in | • | |
| | inks to this new resource where | |
| appropriate th | roughout the CT DEEP website. | |
| C.1: Advertise | e new community resource on Connecticut | |
| Fish and Wild | llife social media accounts. | |
| C.2: Encourage | ge CARE course graduates to view the | |
| webpage and | reach out to organizations if interested. | |
| C.3: Include 1 | ink to this resource as appropriate in email | |
| communication | ons (e.g., CT Fishin' Tips newsletter). | |
| Metrics | Year One (how do we know we are on | Year Five (how do we measure if |
| | the right track?) | we accomplished this objective?) |
| Contact information for fishing groups in Connecticut | | The new webpage is up and running |
| has been collected and the groups have agreed to let us | | and fishing groups in Connecticut |
| | | are getting new members through |
| | | this resource. |
| Evaluation | Evaluation Questions (What needs to | Evaluation Analysis (How do we |
| | be answered to determine if our actions | plan to answer the evaluation |
| | | questions?) |

| | and strategies are accomplishing this objective?) | |
|-------------|---|---|
| | cut anglers using this resource to connect rganizations in the state? | At the end of the 5-year period, encourage community groups included in the resource to communicate new memberships acquired through the community fishing page with us. Using Google Analytics, track traffic to and away from this page, determining if users are engaging with the provided links and contact information for fishing groups. |
| Connections | CARE Introduction to Fishing, Connection | cut Fish and Wildlife social media |

| Theme | Adult-Onset Participation. | |
|--|--|--|
| Goal | Community – create, connect, and coordinate community fishing groups. | |
| Objective #9 | Develop a community group for CARE volunteers. | |
| Strategies | What needs to be done? | Target Audiences |
| A: Develop a | Facebook group for CARE volunteers. | CARE volunteers. |
| | ARE staff member as moderator. | |
| | E volunteers to use the Facebook group. | |
| | engagement of CARE volunteers with | |
| | other to enhance retention. | |
| Actions | To-do list to accomplish above | Resources needed |
| A 1. C | strategies. | C4-CC4:441-1-1-:4 |
| | Facebook group with an intuitive title. | Staff time to create and administer |
| | at group is set to private (i.e., new to apply to join). | Facebook group. Access to CARE email list. |
| | pplication questionnaire that includes | Content author time to update |
| | nation for administrator to confirm that | instructor resources page. |
| | RE volunteer or DEEP staff member. | Buy-in from CARE volunteers. |
| authoring privileges as a group administrator. B.2: Ensure that the staff member will have adequate time to monitor group content and accept new group members in a timely fashion. C.1: Invite CARE volunteers to join the page through an email to all CARE volunteers. C.2: Include the Facebook group as part of the onboarding materials for new CARE volunteers. C.3: Include information about the group on the instructor resources section of the CARE website. | | |
| D.1: Post email content to CARE volunteers through the Facebook group. D.2: Post fun event pictures and updates in the group. D.3: Encourage volunteers to actively participate by posting updates from their outings in the group. D.4: Encourage volunteers to post questions in the Facebook group to receive peer support from other volunteers in addition to staff support. | | |
| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) |
| - | acebook group has been created and one nembers assigned as administrators. | Most CARE volunteers have joined the Facebook group and many are |

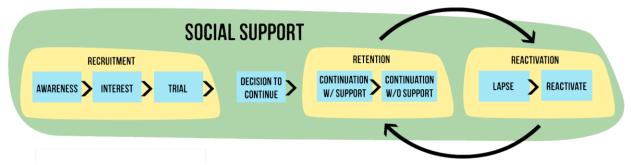
| | | using it to ask questions and share updates. |
|--|---|---|
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) |
| Are volunteers more likely to stay active with the CARE Program? | | Evaluate if implementing the Facebook group increases the number of volunteer hours per |
| Are CARE volunteers able to find support from their peers through the group? | | CARE volunteer. |
| | | Survey CARE volunteers to |
| | | determine if they find the group to |
| | | be a valuable resource worth |
| | | administering on an on-going basis |
| | | at the end of the 5-year period. |
| Connections CARE Program. CT Fish and Wildlife social media | | |

| Theme | Adult-Onset Participation. | |
|--|--|---|
| Goal | Resources – ensure access to online resources for adult-onset anglers. | |
| Objective #10 | Develop an instructional video library (*ONGOING*). | |
| Strategies | What needs to be done? | Target Audiences |
| develop in vid | deo production workflow. | Anglers seeking convenient access to help on specific topics. Anglers who prefer to engage with video content. Resources needed |
| | strategies. | Resources needed |
| instructional rate. A.2: CARE aradditional con B.1: Practice requipment (e.gadditional equaudio. B.2: Have one develop profice B.3: Recruit secreation and variety B.3: Develop to ensure ADA C.1: Coordinate Water Resource and Land Reu YouTube chara C.2: Coordinate social media rafter listing or C.3: Embed variety webpages as a C.4: Incorporate management part of C.5: Include list. | te with Connecticut Fish and Wildlife nanagers to promote videos immediately a YouTube. ideos into CARE and fish management appropriate. Intervideo content in CARE and fish presentations as appropriate. Inks to our YouTube channel alongside ther social media accounts in email and | Staff time to identify needs for video content. Funds to acquire additional video and audio equipment as deemed necessary in Action B.1. Staff time to film and edit video content. Staff time and funds to recruit seasonal staff with backgrounds in content creation. Funds to caption videos with 3 Play Media. Working relationships with Kathleen Perzanowski and social media managers to ensure timely posting and promotion of videos. Content author time to embed videos on webpages and add a link to our YouTube page to webpage signatures. |
| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) |

| Video need identified and a production workflow has been established. | | High-quality videos covering the basic topics of fishing and fish management are housed on the CT DEEP Video YouTube channel and shared widely through our various outreach mediums. |
|--|---|---|
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) |
| Are anglers in Connecticut finding value in our video content? Do viewers go on to further engage with our programs (e.g., the CARE program)? | | Determine the views for fishing content videos on our YouTube channel through time to see if there is growing engagement and a reasonable return on investment by comparing the investment to reach ratio relative to in-person |
| | | presenting. Assess the like/dislike ratio of videos to quantity viewer satisfaction with content. Ask CARE program attendees if they watched any of our video content and if they found it useful. |
| Connections | CARE Program, Fish Management | |

Feeding the Flame:

There's more to becoming an angler than catching a fish. The first time you wet a line involves several stages, including awareness, interest, and trial (i.e., trying fishing). From there, you can decide whether to continue in fishing. This understanding is formalized in the Outdoor Recreation Adoption Model (ORAM), where people progress through a series of steps from awareness of fishing to continued fishing without support. Generating interest in fishing and offering trial experiences are great ways to get new anglers into the pipeline, but continuing social support is needed for many to stay engaged. Accordingly, we need to develop specific resources for people at different stages of the fishing journey.



Outdoor Recreation Adaoption Model figure developed and made available by the Council to Advance Hunting and the Shooting Sports.

In ORAM lingo, this theme is for those in the "continuation with support" category. We want to help them get involved with fishing clubs, fishing on social media, advanced fishing classes, and other supportive environments where they can hone their skills and feel like they are part of the fishing community. We want to lay out the path from first catch to confident and consistent angler who helps the newbies in her fishing club, and maybe even becomes a CARE volunteer. Transforming that initial spark of interest into a lifestyle is a challenge, but the following objectives outline steps we can take to help feed the flame.

| Theme | Feeding the Flame. | | | |
|--|--|---|--|--|
| Goal | Develop start to finish roadmaps of resources to get involved in fishing. | | | |
| Objective #11 | tive Create saltwater and freshwater fishing roadmaps. | | | |
| Strategies | What needs to be done? | Target Audiences | | |
| A: Identify relevant content. B: Compile resources in narrative format. C: Publish roadmaps on the DEEP website and promote on social media. | | New anglers who need additional support to continue fishing. | | |
| Actions | To-do list to accomplish above strategies. | Resources needed | | |
| A.1: Identify and compile relevant freshwater content. A.2: Identify and compile relevant saltwater content. B.1: Sort content by building difficulty/complexity. B.2: Develop a narrative to link topics together and provide guidance to the user. B.3: Consider using the hunting roadmaps developed by the Wildlife Division as inspiration for the format. C.1: Publish roadmaps on the DEEP website. C.2: Add links to roadmap resources from relevant locations through BNR web pages. C.3: Promote the roadmaps from CT Fish and Wildlife social media accounts. | | Staff time to compile freshwater and saltwater educational resources and write narratives that guide users through them. Content author time to develop this content into webpages and publish to the DEEP website. Access to CT Fish and Wildlife social media pages to promote. Google Analytics access to evaluate. | | |
| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) | | |
| Staff have been assigned to the project, content has been compiled and narrative is in development. | | Saltwater and freshwater fishing roadmaps are available on the DEEP website. | | |
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) | | |
| Are anglers in Connecticut finding value in our freshwater and saltwater roadmaps? Do users go on to buy licenses at an increased rate? | | Is usage, as measured by Google Analytics, higher than for the individual products and increasing over time? | | |
| | | Are links to the Online Licensing System being clicked by users, and do these clicks lead to transactions? | | |
| Connections | Connections CARE Program, Resources discussed and created in this R3 Plan | | | |

| Theme | Feeding the Flame. | | |
|---|--|---|--|
| Goal | Develop start to finish roadmaps of resources to get started in fishing. | | |
| Objective #12 | Develop species-specific roadmaps for underutilized fisheries. | | |
| Strategies | What needs to be done? | Target Audiences | |
| | what fish species are best suited for | New or intermediate anglers | |
| roadmap deve | <u>*</u> | interested in targeting new species. | |
| | nd/or develop relevant resources. dmaps to the website and promote on | | |
| social media. | dinaps to the website and promote on | | |
| Actions | To-do list to accomplish above | Resources needed | |
| | strategies. | | |
| A.1: Assess what fisheries are underutilized relative to their fishing quality. A.2: Consider also emphasizing species that are widespread and accessible. A.3: Determine best candidates using above criteria. B.1: Where available, compile relevant existing resources. B.2: Develop additional species-specific resources as needed. B.3: Sort resources into a logical progression. B.4: Connect resources in a narrative format to guide users. C.1: Publish roadmaps on the DEEP website. C.2: Add links to roadmap resources from relevant locations through BNR web pages. | | Staff time to compile species- specific resources and write narratives that guide users through them. Content author time to develop this content into webpages and publish to the DEEP website. Access to CT Fish and Wildlife social media pages to promote. Google Analytics access to evaluate. | |
| social media a | | | |
| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) | |
| Staff have been assigned to the project, content has been compiled and narrative is in development. | | Species-specific fishing roadmaps are available on the DEEP website. | |
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) | |
| Are anglers in Connecticut finding value in our species-specific roadmaps? Do users go on to buy licenses at an increased rate? | | Is usage, as measured by Google Analytics, higher than for the individual products and increasing over time? | |

| | | Are links to the Online Licensing System being clicked by users, and do these clicks lead to transactions? |
|-------------|---|--|
| Connections | CARE Program, Resources discussed and created in this R3 Plan | |

| Theme | Feeding the Flame. | | |
|---|--|---|--|
| Goal | Improve angler recognition. | | |
| Objective #13 | Develop electronic submission system for angler catches (*COMPLETED*). | | |
| Strategies | What needs to be done? | Target Audiences | |
| A: Work with Office of Information Management staff to develop ArcGIS submission portal. B: Develop workflow for reviewing submissions. C: Communicate new submission process to users. | | Anglers seeking continued support through recognition of their fishing success. | |
| Actions | To-do list to accomplish above strategies. | Resources needed | |
| A.1: Identify best software for this purpose and connect with relevant staff expert. A.2: Provide submission form content and creative direction to collaborating staff. A.3: Review and test submission form and provide feedback. B.1: Develop electronic system for reviewing and approving/denying submissions. B.2: Assign staff to review submissions. B.3: Ensure submissions are reviewed in a timely fashion. C.1: Publish links to the new submission system on the DEEP website. C.2: Update Trophy Fish Award and Fishing Challenge promotional materials. C.3: Promote the new submission portal on social media | | ArcGIS expertise. Staff time to develop new electronic submission form content. Staff time to transfer historical catches to new system. Continued staff commitment to review submitted catches in a timely manner. | |
| and CT Fishin Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) | |
| *COMPLETED* | | *COMPLETED* | |
| Evaluation | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) | Evaluation Analysis (How do we plan to answer the evaluation questions?) | |
| Is the electronic submission system increasing engagement with our angler recognition programs? Is the electronic submission system saving staff time? | | Determine if the volume of submissions for angler recognition increased as a result of implementing the electronic submission option. | |

| | | Determine if the staff time required per submission is reduced by the new submission system. |
|-------------|---|--|
| Connections | Trophy Fish Awards, State Record Fish, Youth Fishing Passport Fishing | |
| | Challenge | |

| Theme | Feeding the Flame. | | |
|---|---|---|--|
| Goal | Improve angler recognition. | | |
| Objective #14 | Improve user access to angler-submitted catch data (*COMPLETED*). | | |
| Strategies | What needs to be done? | Target Audiences | |
| A: Work with OIM staff to develop data dashboard. B: Promote data dashboard. | | Anglers seeking continued support through recognition of their fishing success. | |
| Actions | To-do list to accomplish above strategies. | Resources needed | |
| A.1: Identify best software for this purpose and connect with relevant staff expert. A.2: Provide creative direction and logistical support to collaborating staff. A.3: Review and test dashboard and provide feedback. B.1: Include links to the dashboard from the submission portal. B.2: Include links to the dashboard in promotional materials for Trophy Fish Awards and the YFP Fishing challenge. B.3: Promote the dashboard on social media, in the CT Fishin' Tips newsletter, and other places where submitting catches is encouraged. | | ArcGIS expertise. Staff time to develop new electronic submission form content. Staff time to transfer historical catches to new system. Continued staff commitment to review submitted catches in a timely manner. | |
| Metrics | Year One (how do we know we are on the right track?) | Year Five (how do we measure if we accomplished this objective?) | |
| *COMPLETED* | | *COMPLETED* | |
| | Evaluation Questions (What needs to be answered to determine if our actions and strategies are accomplishing this objective?) and providing a valuable service to | Evaluation Analysis (How do we plan to answer the evaluation questions?) Determine if dashboard usage | |
| anglers? | | if interest increases over time. | |
| Connections Trophy Fish Awards, State Record Fish, YFP Fishing Challenge | | | |

Conclusion:

This Angler R3 Plan represents Connecticut's commitment to increasing participation in outdoor recreation but is only the beginning of the efforts that will bring that goal to fruition. By laying out opportunities to better serve our constituents, the plan delivers a guide to implement angler R3 strategies in a more thoughtful and comprehensive way. The plan is not exhaustive and does not assume to identify all relevant barriers or propose optimal solutions to eliminating them. Rather, the plan should be thought of as a living document that will improve as each success and failure teaches us more about ourselves and the constituents that we serve. Accordingly, this plan will be revisited and revised every three years from the time of publication.



Happy anglers fishing at a CARE event.

Appendix

Definitions:

Conservation ID: The Conservation ID is a unique number assigned to each person who buys a sporting license or registers for fishing or hunting education.

License categories: "Inland", "Marine", and "All Waters" categories are broadly defined to include all licenses which include those privileges. For example, "YOUTH FIREARMS HUNTING AND INLAND FISHING LICENSE 16- 17" counts as an Inland license. "TS Stamp" refers to the "TROUT AND SALMON STAMP".

Participants: Participants is the number of unique Conservation IDs within a category, which is taken as a proxy for the number of unique individuals.

Revenue: Revenue is the sum of license income for each license purchased in each category.

This can be useful to consider in conjunction with participation as it indicates shifts in the types of licenses being purchased.

Total: Total is calculated differently for revenue and participants. For revenue, the total is the sum of revenue for each category. For participants, the total is estimated as the number of unique Conservation IDs among all fishing license types, and is thus less than the sum of participants in each license category. For example, an angler who purchases Inland and Marine licenses separately would only count once towards the total.

Year: Year refers to the year during which a license is valid, which may or may not be the year it was purchased.

List of Inland Licenses

- ANNUAL RESIDENT INLAND FISHING LICENSE-AGE 65 PLUS
- INLAND FISHING LICENSE
- INLAND FISHING LICENSE (NON-RESIDENT)
- FREE INLAND FISHING TYPE 17-H
- FREE INLAND FISHING CODE 9
- FREE INLAND FISHING CODE 5
- INLAND FISHING LICENSE 16-17
- FIREARMS HUNTING AND INLAND FISHING LICENSE
- FIREARMS HUNTING AND INLAND FISHING LICENSE (NR)
- YOUTH FIREARMS HUNTING AND INLAND FISHING LICENSE 16-17

List of Marine Licenses

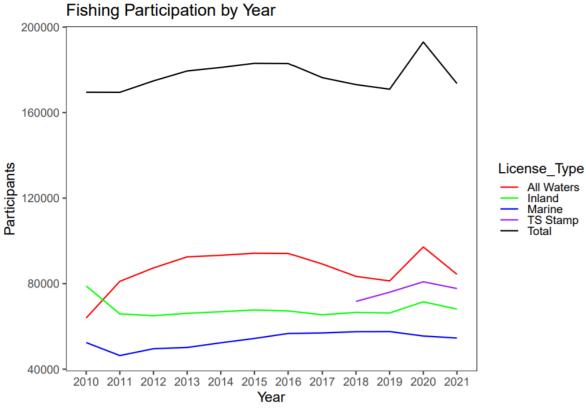
- MARINE WATERS SPORT FISHING AND FIREARMS HUNTING LICENSE (NON-RESIDENT)
- MARINE WATERS SPORT FISHING AND FIREARMS HUNTING LICENSE
- MARINE FISHING LICENSE 16-17
- ANNUAL RESIDENT MARINE FISHING LICENSE-CODE 9
- ANNUAL RESIDENT MARINE FISHING LICENSE-CODE 5
- ANNUAL RESIDENT MARINE FISHING LICENSE-TYPE 17-H
- NON-RESIDENT MARINE FISHING LICENSE
- RESIDENT MARINE FISHING LICENSE
- ANNUAL RESIDENT OVER 65 FREE MARINE FISHING LICENSE
- YOUTH MARINE WATERS SPORT FISHING AND FIREARMS HUNTING LICENSE 16-17

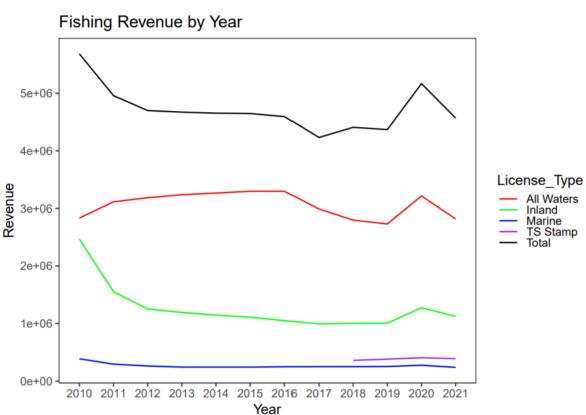
List of All Waters Licenses

- YOUTH FISHING PASSPORT
- JR YOUTH FISHING PASSPORT
- ALL WATERS SPORT FISHING LICENSE 16-17
- ALL WATERS SPORT FISHING LICENSE (NON-RESIDENT)
- ALL WATERS SPORT FISHING LICENSE
- ALL WATERS SPORT FISHING AND FIREARMS HUNTING LICENSE
- ALL WATERS SPORT FISHING AND FIREARMS HUNTING LICENSE (NON-RESIDENT)
- FIREARMS SS LICENSE. W/MUZZLE:ALL WATER FISH;PVT LND DEER-S/R & MUZZ;PVT SPRING TRKY
- FIREARMS SUPER SPORT LICENSE: ALL WATERS FISH; FIREARMS HUNT; PVT LAND DEER-S/R; PVT LAND SP TURKEY
- FIREARMS SS WATERFOWL LICENSE-ALL WATER FISH;FIREARMS HUNT;MIG DUCK STAMP;HIP PERMIT

- FIREARMS SS WATERFOWL LIC. ALL WATER FISH;FIREARMS HUNT;MIG DUCK STAMP;HIP PERMIT 16-17
- FIREARMS SS LICENSE: ALL WATERS FISH; FIREARMS HUNT; PVT LAND DEER-S/R; PVT LAND SP TURKEY 16-17
- YOUTH ALL WATERS SPORT FISHING AND FIREARMS HUNTING LICENSE 16-17
- ALL WATERS SPORT FISHING LICENSE AND ARCHERY DEER/SMALL GAME 16-17
- FIREARMS SS LIC. W/MUZZLE:ALL WATER FISH;PVT LND DEER-S/R&MUZZ;PVT SP TRKY 16-17
- ARCHERY SUPER SPORT LICENSE: ALL WATERS FISH; SMALL GAME DEER ARCHERY; P/L SPRING TURKEY 16-17

Participation and Revenue Graphs By License Category





| License_Type | Year | Participants | Revenue |
|--------------|------|--------------|---------|
| All Waters | 2010 | 63935 | 2832259 |
| All Waters | 2011 | 81070 | 3114907 |
| All Waters | 2012 | 87351 | 3185851 |
| All Waters | 2013 | 92515 | 3237238 |
| All Waters | 2014 | 93256 | 3266588 |
| All Waters | 2015 | 94202 | 3297870 |
| All Waters | 2016 | 94093 | 3297185 |
| All Waters | 2017 | 89168 | 2989501 |
| All Waters | 2018 | 83387 | 2796765 |
| All Waters | 2019 | 81266 | 2729287 |
| All Waters | 2020 | 97157 | 3216249 |
| All Waters | 2021 | 84345 | 2817118 |
| Inland | 2010 | 78911 | 2467468 |
| Inland | 2010 | 65860 | 1550251 |
| Inland | 2011 | 65001 | 1252562 |
| Inland | 2012 | 66120 | 1192633 |
| Inland | 2013 | 66853 | 1145707 |
| Inland | 2014 | 67692 | 1108875 |
| Inland | 2016 | 67227 | 1049828 |
| Inland | 2010 | 65422 | 993303 |
| Inland | 2017 | | 1003622 |
| Inland | | 66544 | 1003622 |
| | 2019 | 66260 | |
| Inland | 2020 | 71494 | 1272352 |
| Inland | 2021 | 68105 | 1125616 |
| Marine | 2010 | 52435 | 386399 |
| Marine | 2011 | 46353 | 293932 |
| Marine | 2012 | 49559 | 262061 |
| Marine | 2013 | 50139 | 243035 |
| Marine | 2014 | 52334 | 242682 |
| Marine | 2015 | 54356 | 242392 |
| Marine | 2016 | 56685 | 248536 |
| Marine | 2017 | 56929 | 249643 |
| Marine | 2018 | 57519 | 249779 |
| Marine | 2019 | 57577 | 252811 |
| Marine | 2020 | 55504 | 274731 |
| Marine | 2021 | 54555 | 237376 |
| Total | 2010 | 169519 | 5686126 |
| Total | 2011 | 169477 | 4959090 |
| Total | 2012 | 174824 | 4700474 |
| Total | 2013 | 179463 | 4672906 |
| Total | 2014 | 181113 | 4654977 |
| Total | 2015 | 183027 | 4649137 |
| Total | 2016 | 182929 | 4595549 |
| Total | 2017 | 176341 | 4232447 |
| Total | 2018 | 173091 | 4409191 |
| Total | 2019 | 170945 | 4369883 |
| Total | 2020 | 193005 | 5168517 |
| Total | 2021 | 173613 | 4569645 |
| TS Stamp | 2018 | 71682 | 359025 |
| TS Stamp | 2019 | 75982 | 380590 |
| TS Stamp | 2020 | 80864 | 405185 |
| TS Stamp | 2021 | 77708 | 389535 |
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